

CLAIMS

What is claimed is:

5 1. An anti-rotation guide for a valve lifter for an internal combustion engine having a camshaft disposed within an engine block of said engine, and a valve train, comprising:

 a) a sleeve portion having an inner surface and an outer surface and a first end and a second end; and

10 b) an anti-rotation feature disposed on one of said first end and said second end of said sleeve portion for cooperating with said lifter to prevent axial rotation of said lifter within said guide,

 said sleeve portion being oriented when installed from an opening of a bore in said engine proximate said camshaft, said first end of said sleeve portion being adjacent
15 said camshaft and said second end of said sleeve portion being adjacent said valve train.

 2. A guide in accordance with Claim 1 wherein a diameter of said outer surface is selected such that said guide may be press-fit into said engine bore.

20 3. A guide in accordance with Claim 1 wherein a diameter of said outer surface is selected such that said guide may be slip-fit into said engine bore.

 4. A guide in accordance with Claim 1 wherein said anti-rotation feature is
25 selected from the group consisting of an arm and tang, a flap, and an orifice flat.

 5. A guide in accordance with Claim 1 comprising a plurality of said sleeve portions connected at said first ends thereof, each sleeve portion having an anti-rotation element disposed at a second end thereof,

wherein said guide may be used with a plurality of said valve lifters in a plurality of said bores in said engine.

5 6. A guide in accordance with Claim 5 further comprising means for attaching said guide to said engine.

7. A guide in accordance with Claim 1 wherein said lifter is selected from the group consisting of solid lifter and hydraulic lifter.

10 8. A guide in accordance with Claim 1 wherein said valve train includes a rocker arm assembly.

9. A guide in accordance with Claim 1 further comprising an oil aperture communicating an engine oil gallery with said lifter.

15 11. A internal combustion engine having a camshaft and a valve train and a valve lifter, said engine comprising:

an anti-rotation guide for receiving said valve lifter, including,
a sleeve portion having an inner surface and an outer surface and a first end and
20 a second end, and

an anti-rotation feature disposed on one of said first end and said second end of said sleeve portion for cooperating with said lifter to prevent axial rotation of said valve lifter,

said sleeve portion being oriented when installed from an opening in a bore in
25 said engine proximate said camshaft, said first end of said sleeve portion being adjacent said camshaft and said second end of said sleeve portion being adjacent said valve train.